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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,486	08/10/2001	Shingo Eguchi	12732-067001	2842
26171 7590 11/23/2007 FISH & RICHARDSON P.C. P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER SEFER, AHMED N	
			ART UNIT 2826	PAPER NUMBER
			MAIL DATE 11/23/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

09/925,486

Applicant(s)

EGUCHI ET AL.

Examiner

A. Sefer

Art Unit

2826

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-12 and 18-27 is/are allowed.
- 6) ☒ Claim(s) 13, 14, 17 and 28 is/are rejected.
- 7) ☒ Claim(s) 15 and 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment*

1. The amendment filed September 18, 2007 has been entered; no new claims have been introduced.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 13, 14, 17 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al. ("Yamazaki") USPN 5,818,070.

Yamazaki discloses in figs. 1-4 a semiconductor device comprising: a first electrode 102/104; an insulating film 106/101 formed on said first electrode; a contact hole 145 (fig. 4A) which is provided in said insulating film and has a depth so as to reach said first electrode; a gate wiring 112/114 crossing a plurality of source wirings 138 (as recited in claim 28) which is formed on said insulating film and connected with said first electrode through said contact hole; a second electrode 113/115 provided on said insulating film, wherein said gate wiring and said second electrode are provided on and are in physical contact with said insulating film (figs. 1D and 2D); and wherein said gate wiring and said electrode are separated from each other (separated by dielectric layers 106, 116, 117 and 137 as shown in figs. 1A, 1D and 1I).

Although Yamazaki discloses (see fig. 4A and col. 2, lines 15-25) that the first and second gate lines/electrodes substantially overlap each other and that Yamazaki's fig. 4A shows the first electrode 102 being overlapped with the second electrode 113, the percentage of overlap is not specifically disclosed. However, it would have been obvious to one skilled in the art at the time the invention was made to meet the recited percentage of overlap, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or working ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

Re claim 14, Yamazaki teaches employing the invention in an active matrix liquid crystal device, but does not specifically disclose a liquid crystal layer provided over said second electrode. However, it would have been obvious to form to employ a liquid crystal layer with Yamazaki's device since it is conventional in the art of making liquid crystal device.

Re claim 17, Yamazaki omits that electronic equipment selected from the group consisting of a video camera, a digital camera and other various electronic equipment. However, Examiner takes Official Notice that an electronic equipment comprising a display device wherein said electronic equipment selected from the group consisting of a video camera or a digital camera is conventional and well known. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have used any of the various electronic equipment since Examiner takes Official Notice that due to their low power consumption, displays have become a necessary and indispensable structural element of an electronic equipment.

#### ***Response to Arguments***

4. Applicant's arguments with respect to claim 13 have been considered but they are not persuasive. While Applicants assertion that gate line 112 and gate electrode 113 are formed

from the same layer (as shown in figs. 1B and 1C) and that layers 112 and 113 are connected -- although fig. 4A appears to show that they are connected, the specification is silent regarding the connection -- appears to be persuasive, the assertion that Yamazaki does not describe or suggest a feature recited by amended claim 13 is not persuasive because Yamazaki clearly shows that gate wiring and said electrode are separated from each other (separated by dielectric layers 106, 116, 117 and 137 as shown in figs. 1A, 1D and 1I).

#### ***Allowable Subject Matter***

5. Claims 1-12 and 18-27 are allowed.
6. Claims 15 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tomita (USPN 6,275,061) discloses a semiconductor device comprising: a first electrode 61; an insulating film 62 formed on said first electrode; a contact hole 79 which is provided in said insulating film and has a depth so as to reach said first electrode; a gate wiring 80 which is formed on said insulating film and connected with said first electrode through said contact hole; and a second electrode 50 provided on said insulating film.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Sefer whose telephone number is (571) 272-1921.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sue Purvis can be reached on (571) 272-1236.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ANS  
November 19, 2007

/A. Sefer/  
Primary Examiner  
Art Unit 2826